

REMARKS

The foregoing amendment amends claims 2, 4, 10-12, 14-16, and 18-20 and cancels claims 26-28, 32, 33, 48, 49, 73, 74 and 81-86. Support for the amendment is found throughout the specification. *See e.g.*, p. 64, lines 2-5; p. 68, line 3-p. 69, line 12; Figs. 6, 9 and 10. Upon entry of the amendment, claims 2-4, 10-21 and 76-78 are pending in the application.

REJECTION OF CLAIMS 10, 14 AND 18 UNDER 35 U.S.C. 112

The examiner rejected claims 10, 14 and 18 under 35 U.S.C. 112, second paragraph, alleging that the claims are indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the examiner alleged that the “means for sending,” “means for stopping,” “means for estimating,” “means for again sending,” and “means for starting to send” are means plus function limitations and that the written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function. O.A. p. 5. Applicant disagrees. For example, the specification describes that the “terminal apparatus 40a sends packets of the trial class for a predetermined period T1.” [0213]; Fig. 6.

However, in order to facilitate a notice of allowance, the foregoing amendment to claims 10-12, 14-16 and 18-20 amends the claims so that the claims cited by the examiner no longer include means plus function limitations. For example, claim 10 was amended to replace “means for sending packets of the trial class for a predetermined period” with “a unit that sends packets of the trial class for a predetermined period.” Similar amendments were made to the other claim limitations and claims identified by the examiner. Support for these amendments is found in the specification and original claims. *See e.g.*, Figs. 4, 6, 8, 10 and accompanying text.

REJECTION OF CLAIMS 4 AND 18-20 UNDER 35 U.S.C. 102(b)

The Examiner rejected claims 4 and 18-20 under 35 U.S.C. 102(b) as being anticipated by Elek et al. Claim 4 requires that if the communication quality becomes insufficient, then immediately stopping to send packets of the trial class and claim 18 requires a unit that immediately stops if the communication quality becomes insufficient, to send packets of the trial class. Elek does not describe immediately stopping to send packets of the trial class if the communication quality becomes insufficient. Elek describes a retry method that uses a back-off time. Probes are sent to a destination for a time period selected by the sender. At the end of the time period, the destination sends a measurement report to the source which includes the number of probe packets received. If the set up is blocked based of the content of the measurement report, then the source backs off for a random time before issuing a new probe. *See* Elek, II(B) and II(C).

In rejecting claims 4 and 18, the examiner cited Section II(B), 3d paragraph of Elek. The cited section of Elek describes that the loss rate that the probe experiences is used to make a decision as to whether the session can be established. Elek does not describe immediately stopping to send trial packets if the communication quality becomes insufficient because Elek's loss rate is determined after sending the probe packets for a predetermined period of time. Elek describes that:

The destination counts the received packets until the the [sic] probe time period expires. After that it sends a measurement report to the source which consists of the number of probe packets received.

Elek, II(C), 3d paragraph.

In response to Applicant's arguments for patentability, the examiner alleged that claims 4 and 18 do not require stopping the probes prior to the expiration of the sender selected time period. Applicant disagrees. However, the amendment to claim 4 clarifies that if the communication quality of the packets becomes insufficient then immediately stopping to send packets of the trial class before elapse of the predetermined period. The amendment

to claim 18 clarifies that a unit immediately stops if the communication quality becomes insufficient, to send packets of the trial class before elapse of the predetermined period.

In light of the foregoing, Elek does not describe each and every element of claims 4 and 18. Claims 19 and 20 depend from claim 18 and are patentable for at least the same reasons as claim 18 and may be patentable for additional reasons as well.

REJECTION OF CLAIMS 2, 3, 10-12 AND 14-16 UNDER 35 U.S.C. 103(a)

The examiner rejected claims 2, 3, 10-12 and 14-16 under 35 U.S.C. 103(a) as being unpatentable over Elek in view of Isoyama (US 2002/0044557 A1). The examiner admitted that Elek does not teach estimating according to a communication quality level of the preceding trial-class packets. However, the examiner alleged that Isoyama teaches such a limitation.

Isoyama describes that a performance monitoring packet is sent prior to the transmission of the communication packets in order to determine the communication quality of the network and a priority class for the communication packets. The priority class of the performance monitoring packet is initially set to the lowest priority and is transmitted to the receiver by the sender. The receiver calculates the delay for the packet by comparing the time the performance monitoring packet was sent by the sender and the time it was received by the receiver. The receiver sends a performance monitoring result packet back to the sender that includes the delay information.

The sender checks the performance monitoring result packet to determine whether the communication quality satisfies that requested by the application sending the communication packets. If the communication quality is not satisfied, then the sender increases the priority class and sends another performance monitoring packet to the receiver. The priority level is increased until the communication quality is satisfied or the top priority class is reached. If the communication quality is satisfied, then the communication packets are assigned the

priority level associated with the performance monitoring packet and transmitted. If the top priority class is reached and the communication quality is not satisfied, then the communication is cancelled or the communication packets are sent using the top priority. Isoyama, [0027-0032]; Fig. 2.

Claims 2, 3, 10, and 14 all require estimating whether or not it is possible to send packets of the trial class based on a communication quality of the preceding trial-class packets. For example, Claim 2 recites, *inter alia*,

if it [the communication quality] is insufficient, then stopping to send packets of the trial class for a second predetermined period;

after the second predetermined period, estimating according to a communication quality level of the preceding trial-class packets whether or not it is possible to send packets of the trial class;

if it is possible, again sending packets of the trial class for the predetermined period from the caller terminal apparatus; and

if it is impossible, partly or entirely stopping to send packets of the trial class.

Claim 10 also requires using the communication quality level of the preceding trial-class packets to determine whether or not it is possible to send packets of the trial class. Claim 3 recites, *inter alia*:

if it [the communication quality] is insufficient, stopping to send packets of the trial class for a second predetermined period;

after the second predetermined period, estimating whether or not it is possible to send packets of the trial class according to an execution probability . . . estimated from a communication quality of the preceding trial-class packets.

Claim 14 also requires using an execution probability based on a communication quality of the preceding trial-class packets.

Isoyama does not describe that if it is impossible to send packets of the trial class after a second predetermined period of time, then partly or entirely stopping to send packets of the trial class, as required by claims 2 and 10. Instead, Isoyama describes that it stops sending performance monitoring packets under two conditions: 1) when the communication quality satisfies that requested by the application sending the communication packets or 2) when the highest priority class is reached.

Moreover, Isoyama does not describe estimating according to a communication quality level of the preceding trial-class packets whether or not it is possible to send packets of the trial class. Isoyama sends another performance monitoring packet if the communication quality of the current performance monitoring packet does not satisfy the communication quality requested by the application and the priority class of the current performance monitoring packet is not the highest priority class. Isoyama describes that if the communication quality of the performance monitoring packet is not satisfactory and the current priority class is not the highest priority class, then the “priority class is shifted up by one class.” Isoyama, [0031]. Isoyama does not describe using a communication quality level of the preceding trial-class packets to estimate whether it is possible to again send packets of the trial class. Instead, Isoyama uses the communication quality of the current performance monitoring packet and the communication quality required by the application to determine whether to send another performance monitoring packet.

The examiner alleged that it would have been obvious to combine “Elek’s method of teaching a measurement based call admission control with Isoyama’s method of monitoring communication quality, because Elek teaches a host probes the network to see if there is capacity available for a new session, and Isoyama’s method would allow for providing classified communication quality in the case where communicative applications requesting the same communication quality may require different classes depending on conditions such as network congestion.” (citations omitted), O.A., p. 9. There is no reason to combine Elek and Isoyama in the manner suggested by the examiner since the priority classes are

incompatible. Elek describes two priorities within the service class. Established sessions are sent via high priority and probes are sent via low priority. In contrast, Isoyama describes that if the communication quality is satisfied that the communication packet is sent using the same priority class as the performance monitoring packet. If the communication quality is not satisfied, then another performance monitoring packet is sent with a higher priority.

As demonstrated by the foregoing, claims 2, 3, 10 and 14 are patentable over Elek and Isoyama. Claims 11-13 depend from claim 10 and claims 15-17 depend from claim 14. The dependent claims are patentable for at least the same reasons as the corresponding independent claims and may be patentable for additional reasons as well.

REJECTION OF CLAIMS 13, 17, 21 AND 76-78 UNDER 35 U.S.C. 103(a)

The Examiner rejected claims 13, 17, 21 and 76-78 under 35 U.S.C. 103(a) as being unpatentable over Elek and Isoyama, and further in view of Graham et al. (U.S. 6,097,722). Claim 13 depends from claim 10, claim 17 depends from claim 14, claims 21 depends from claim 18, and claims 76-78 depend from claim 2. As discussed in the preceding section, Elek and Isoyama fail to disclose each and every element of the independent claims. The examiner does not allege that Graham remedies the deficiencies of Elek and Isoyama. Thus, the dependent claims are patentable for at least the same reasons as the corresponding independent claims and may be patentable for additional reasons as well.

CONCLUSION

The application is believed to be in condition for allowance and a notice of allowance is respectfully requested. If there are any issues that can be addressed via telephone, the Examiner is asked to contact the undersigned at 404.685.6799. The Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account 11-0855.

Respectfully submitted,

/Brenda O. Holmes/

Brenda O. Holmes, Esq.
Reg. No. 40339

Kilpatrick Stockton LLP
1100 Peachtree Street, Suite 2800
Atlanta, Georgia 30309
(404) 815-6500
KS File: 44471/311941